U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION REPORT

I. HEADING

Date: June 12, 1998

From: Irmee Huhn, OSC, Region II
Removal Action Branch

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Subject: Pyridium Mercury Disposal Site No. 1 (Pyridium 1)
Village of Harriman, Orange County, New York

POLREP NO. Seven (7)

II. BACKGROUND

Site No.: EV
Response Authority: CERCLA
NPL Status: Non-NPL
State Notification: NYSDOH notified
Action Memo Status: Signed 09/29/95, 9/25/97 and 3/6/98
Start Date: 1/9/95, 9/30/97, and 3/18/98
Demobilization Date: 4/5/95, on-going
Completion Date: 4/7/95, on-going

III. SITE INFORMATION

A. Incident Category: Illegal dump

121277

B. Site Description

1. Site location

The Pyridium Mercury Disposal Site No. 1 (Pyridium 1)was a trailer park located at the intersection of State Route 17M and Harriman Heights Road in the Village of Harriman, Orange County, New York. Five mobile home trailers were located at the trailer park. All the trailers were occupied as residential dwellings.

A white clay-like material discovered at the trailer park, was used to fill low-lying areas of a wetland. This material was reportedly a waste product from the production of niacinamide by the Pyridium Corporation during the 1940's and 1950's. Nepera Inc. of Harriman, New York, currently occupies and operates the facility previously operated by the Pyridium Corporation.

B. Preliminary Assessment/Site Inspection Results

On October 20, 1994, the United States Environmental Protection Agency (EPA) collected a composite waste sample for waste characterization and mercury speciation. The sample was analyzed for Target Compound List (TCL) parameters, Target Analyte List (TAL) parameters and toxicity by the Toxicity Characteristic Leachate Procedure (TCLP).

Although the TCLP results are below regulatory limits, the TAL analytical results indicate the presence of mercury at an estimated concentration of 130 milligrams per kilogram (mg/kg). All the other compounds detected were below the New York State Department of Environmental Conservation (NYSDEC) recommended soil cleanup objectives.

Mercury speciation analytical results indicated that the sample contained no significant quantities of elemental mercury, mono-methyl mercury, or dimethyl mercury. When the sample was dissolved in an acid leach test, the mercury +2 ion leachate concentration was essentially the same as the total mercury concentration. Based on these results, the laboratory concluded that the sample was a chemical substrate contaminated with a mercuric or mercurous salt.

On November 17, 1994, the EPA Environmental Response Team (ERT) and the Response Engineering and Analytical Contractor (REAC) collected dust samples in each of the mobile homes at the trailer park. The analytical results of the dust sampling

indicated mercury concentrations ranging from 0.84 mg/kg to 26.8 mg/kg.

On November 28, 1994, Nepera, Inc. of Harriman, New York signed an Administrative Order on Consent (AOC) with EPA agreeing to fund relocation of the residents of the trailer park. Nepera has distributed relocation settlements to eligible residents. The amount of the settlement was based on federal relocation guidelines.

On January 9, 1995, verbal authorization was given by the EPA Director of the Emergency and Remedial Response Division to decontaminate, remove and dispose of the mobile homes, storage sheds and decks from the trailer park; disconnect water, sewer and electric utilities; remove heating oil and propane storage tanks; and fence the property and post warning signs. An Action Memorandum confirming verbal authorization was approved on February 27,1996. For specific details refer to Polreps 1-3.

IV. RESPONSE INFORMATION

A. Situation

1. Current situation

ERRS continues excavation, stockpiling and load out operations of mercury contaminated soils.

2. Removal actions to date

Due to equipment failure site work was temporarily suspended from May 29 until Wednesday, June 3, when a replacement excavator was mobilized.

On Thursday, June 4, a surveyor was mobilized to the site to perform the following tasks: identify contours and elevations of the stream and wetland area, install a 25' grid along route 17M and the wetlands to locate post excavation samples and survey existing post excavation sample locations.

Analytical results were received for the water samples collected on May 29. The data revealed a mercury concentration of 27 parts per billion (ppb) which is above the allowable level for a surface water discharge permit.

On Friday, June 5, 1998 a water sample was collected from the

pooled water in the excavation. Prior to laboratory analysis the sample was filtered with a .45 micron filter. The result, 0.2 ppb indicates that mercury is in the suspended solids and can be filtered out.

On Friday, June 5, ERRS continued excavation and stockpiling operations of mercury contaminated soils. A backhoe was mobilized for the day to backfill the excavation along the northwest corner of the site. Post excavation samples were collected in this area which verified that the cleanup level was attained. Two loads of clean fill and one load of stone were delivered to establish an access road and staging area for the delivery of a 21,000 gallon water storage tank.

Dewatering activities were initiated on June 8 to remove pooled water so excavation activities could continue.

On Wednesday, June 10, during excavation activities a strong "rotten egg" odor was noticed at depth of approximately 2-3 feet below ground level in a dark brown/black peat moss type material. Excavation activities were suspended in that area awaiting additional air monitoring equipment.

On Thursday, June 11, a hydrogen sulfide meter was brought on site to monitor these odors. Level B equipment was also brought to the Site as a precautionary measure. Hydrogen sulfide was detected at a concentration of 1 ppm. The action level to upgrade to level B is 10 ppm. The operator or spotter will use a hydrogen sulfide monotox during the remainder of the project during excavation activities. START will provide hydrogen sulfide monitoring in addition to dust monitoring, organic vapor and mercury vapor monitoring already being conducted.

As of Friday, June 12, a total of 2,409.5 tons of mercury contaminated soils were loaded for off-site disposal at G.R.O.W.S. landfill in Morrisville, Pennsylvania. START continued to air monitor and collect post excavation samples as the excavation proceeds.

3. **Enforcement**

The Office of Regional Council is reviewing available site documentation to identify PRPs and will evaluate the viability of legal claims stated by Nepera.

B. **Next Steps**

A. Excavation and transportation and disposal of contaminated soil will continue.

B. Backfilling operations will continue.

C. Dewatering the excavation.

D. Collection of post excavation samples.

C. **Key Issues**

The local paper was contacted by an area resident after an odor was reported at the post office, which is located across the street from the site. The odor problem coincided with the breakdown of the excavator and temporary suspension of site work. On June 8, the OSC contacted the concerned citizen to invite him to the trailer to discuss his concerns and eliminate any misconceptions. He told me his concerns over the phone and I detailed all related site activities. I gave him an open invitation to stop by any time he has any additional issues he would like to discuss. On June 10 the OSC attended the Village of Harriman board meeting to discuss site activities, provide fact sheets and address township concerns. The concerned citizen made comments at the meeting about the site that we had previously discussed. I responded to his concerns again.

Water infiltrating the excavation continues to be an issue.

V. COST INFORMATION

The following are estimated costs for the removal action as of June 12, 1998:

	PROJECT CEILING	PREVIOUS COSTS	COSTS TO DATE	FUNDS REMAINING
ERRS (ERCS) Costs	$1,028,400	$102,000	$179,500	$746,900
START (TAT) Costs	$ 81,400	$19,700	$12,500	$ 49,200
Contingency	$ 209,500			$209,500
EPA Cost	$107,000	$24,200	$ 37,500	$45,300
TOTAL PROJECT CEILING	$1,426,300	$145,900	$229,500	$1,050,900

The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The cost accounting provided in this report does not necessarily represent an exact monetary figure, which the EPA may include in any claims for cost recovery.

VI. DISPOSITION OF WASTE

Wastestream	Medium	Quantity	Containment-Migration Control	Treatment	Disposal
Non-hazardous soil, wood, PPE and debris	solid	2,409 tons	dump trailers/ triaxle dump trucks	landfill	G.R.O.W.S. Landfill, Morrisville, PA